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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,877	05/17/2006	Justus Petersson	P18221-US1	8392

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EXAMINER	
PHAM, TIMOTHY X	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
11/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,877	PETERSSON ET AL.	
	Examiner	Art Unit	
	TIMOTHY PHAM	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 12-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10, 12-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 and 12-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 10, and 24 recite the limitation "the service type". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-10 and 12-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mononen (US 2003/0229595; Cited in PTO-892 Part of Paper No. 20090601) in view of Sawyer (US Patent No. 5828737; same as WO 9716034 cited in IDS) and Balachandran (US Patent No. 6,006,085).

Regarding claims 1 and 12, Mononen discloses a method and a telecommunications charging system for determining a charging rate related to a data bit transfer session for a mobile client communicating with a radio resource managing unit, over a wireless communications link, comprising the steps of:

dynamically determining a bandwidth on the wireless communication link available to the bit transfer session for said mobile client (paragraphs [0069], [0071], [0075], [0078]);

said charging logic applying determining charging rate for said mobile client based on said received bandwidth information for said data bit transfer session related to the bit transfer session based on said received information from the radio resource managing unit (paragraphs [0041], [0068]-[0069], [0072], [0079], e.g., offering low-cost services to a user from a less used cell, the user may be tempted to choose such a cheaper alternative).

Mononen fails to specifically disclose charging logic applying determining a particular charging rate for mobile client based on received bandwidth, and a charging logic receiving information from the radio resource managing unit about the bandwidth on the wireless communication link that the bit transfer session is available to use.

However, Sawyer discloses applying determining a particular charging rate for mobile client based on received bandwidth (col. 4, lines 10-15; col. 5, lines 1-5, e.g., The processing device 42 then further functions to multiply the derived total bandwidth usage amounts by a charging rate to determine a charging amount to be billed for each communication, with the determined charging amount reported to the billing center 44 for the addition of other charge items and the generation of a bill to the user)

Therefore, taking the teachings of Mononen in combination of Sawyer as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to determine a particular charging rate for mobile client based on received bandwidth for advantages of improving billing system by providing efficiency costs to consumers.

Mononen in combination with Sawyer discloses a charging logic (Mononen: Fig. 7, reference 140; e.g., billing module) , but fails to specifically disclose a charging logic receiving information from the radio resource managing unit about the bandwidth on the wireless communication link that the bit transfer session is available to use.

However, Balachandran discloses disclose a charging logic receiving information from the radio resource managing unit about the bandwidth on the wireless communication link that the bit transfer session is available to use (col. 2, lines 62-65; col. 3, lines 37-42, e.g., if a network provider can provide flexible pricing based upon the system utilization, then the system revenue can be maximized, while simultaneously maximizing the usage of the available wireless bandwidth).

Therefore, taking the teachings of Mononen in combination of Sawyer and Balachandran as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to receive information from the radio resource managing unit about the bandwidth on the wireless communication link that the bit transfer session is available to use in order to provide efficiency costs to consumers.

Regarding claims 2 and 13, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic receiving said information from the radio resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed (Mononen: paragraphs [0039], [0069], [0071], [0075], [0078], e.g., dependent upon the bandwidth required to transmit the content).

Regarding claims 3 and 14, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic receiving said information from the radio resource managing unit at predetermined intervals (Mononen: paragraphs [0017], [0046], e.g., upon receiving information from the operator12, the user may select the preferred service, and either an amount to be paid or selects a period of time).

Regarding claims 4 and 15, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic receiving said information from the radio resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed (Sawyer: col. 2, lines 13-19; col. 4, lines 10-15) and the bandwidth change has been applied to the session for a predetermined period of time (Sawyer: col. 5, lines 15-19, e.g., The processing device 42 is programmed with a predetermined time interval .DELTA.t, and operates to determine (from the reported instantaneous measurements) the maximum amount 48 of bandwidth used during each time interval by each communication or call carried over the communications link 18 or air interface 26).

Therefore, taking the teachings of Mononen in combination of Sawyer and Balachandran as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have the charging logic receiving information from the radio resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed and the bandwidth change has been applied to the session for a predetermined

period of time for advantages of improving billing system by providing efficiency costs to consumers.

Regarding claims 5 and 16, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic receiving said information from the radio resource managing unit at intervals which depend on the service type of the bit transfer session (Mononen: paragraphs [0069], [0071], e.g., a price is to be charged to a user of a mobile terminal dependent upon the bandwidth required to transmit the content).

Regarding claims 6 and 17, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic receiving said information from the radio resource managing unit via an application server which relays said information from the radio resource managing unit to the charging logic (Mononen: paragraphs [0042]-[0043], e.g., the broadcasted network information does not include information of a negotiation possibility, the network can send the bargaining information in another signaling channel to the term).

Regarding claims 7 and 18, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic receiving said information from the radio resource managing unit via a mobile proxy which relays said

information from the radio resource managing unit to the charging logic (Mononen: Fig. 7, references 112 and 118; paragraphs [0022], [0068]-[0069], [0071]-[0072]).

Regarding claims 8 and 19, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic adapting the charging rate related to the bit transfer session such that the session is charged according to a first charging rate associated with a first charging class when the bandwidth on the wireless link available to the bit transfer session is within a first predetermined interval (Mononen: paragraphs [0042], [0045]-[0046], [0051], e.g., CASE1 option) and according to a second charging rate associated with a second charging class when the bandwidth on the wireless link available to the bit transfer session is within a second predetermined interval (Mononen: paragraphs [0042], [0045]-[0046], [0051], e.g., CASE2 option).

Regarding claims 9 and 20, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic determining that the charging rate related to the bit transfer session should be zero when the bandwidth on the wireless link available to the bit transfer session is below a predetermined threshold level (Sawyer: col. 6, lines 19-30).

Therefore, taking the teachings of Mononen in combination of Sawyer as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to determine the charging rate related to the bit transfer session should be zero when the bandwidth on the wireless link available to the bit transfer session is below a predetermined

threshold level for advantages of improving billing system by providing efficiency costs to consumers.

Regarding claims 10 and 24, Mononen in combination with Sawyer and Balachandran discloses the method and the telecommunications charging system for determining said charging rate according to claims 1 and 12 respectively, further comprising the charging logic adapting the charging rate related to the bit transfer session based on said received information from the radio resource managing unit such that the impact of said received information from the radio resource managing unit on the charging rate of the bit transfer session depends on the type of service of the bit transfer session (Mononen: paragraphs [0042], [0045]-[0046], [0067], [0071], [0073]).

Regarding claims 21, Mononen in combination with Sawyer and Balachandran discloses the telecommunication charging system according to claim 12 is incorporated in a proxy node which further incorporates a mobile proxy (Mononen: paragraphs [0068]-[0069], [0072]-[0074], e.g., a content proxy 110).

Regarding claims 22, Mononen in combination with Sawyer and Balachandran discloses the telecommunication charging system according to claim 12 is incorporated in an application/service node which further incorporates an application logic (Mononen: paragraphs [0064]-[0065]).

Regarding claims 23, Mononen in combination with Sawyer and Balachandran discloses the telecommunication charging system according to claim 12 is incorporated in a charging node, which is a node dedicated to charging functionality (Mononen: paragraph [0069], [0072]-[0073]).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR I.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR I.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617